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2 **CLAIMS:**

3       1.     A processor-readable medium having processor-executable  
4 instructions that, when executed by a processor, performs a method comprising:

5             receiving a digital television (DTV) application and its associated metadata;  
6             generating a data grouping having application signaling information,  
7 wherein the information is based upon the metadata associated with the DTV  
8 application;

9             sending a transmission to a DTV receiving unit, wherein such transmission  
10 comprises the data grouping.

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12       2.     A medium as recited in claim 1, wherein the method further  
13 comprises storing the DTV application and its associated metadata.

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15       3.     A medium as recited in claim 1, wherein the method further  
16 comprises constructing and formatting a DTV data service transmission which  
17 comprises the DTV application.

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19       4.     A medium as recited in claim 1, wherein the method further  
20 comprises generating a content referencing identifier for the DTV application.

1           5.     A medium as recited in claim 1, wherein the associated metadata  
2 comprises a data structure embodied on a processor-readable medium, the  
3 structure having fields comprising:

4                 an application identifier field for identifying the DTV application;

5                 an originator identifier field for identifying the originator of the DTV  
6 application;

7                 an application-type field for indicating a type of the DTV application;

8                 a visibility field for indicating the degree of control a user has over the  
9 DTV application; and

10                a rating field for indicating a rating of the DTV application.  
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12           6.     A medium as recited in claim 1, wherein the associated metadata  
13 comprises a data structure embodied on a processor-readable medium, the  
14 structure having fields consisting of:

15                 an application identifier field for identifying the DTV application;

16                 an originator identifier field for identifying the originator of the DTV  
17 application;

18                 an application-type field for indicating a type of the DTV application;

19                 a visibility field for indicating the degree of control a user has over the  
20 DTV application; and

21                a rating field for indicating a rating of the DTV application.  
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1           7.     A medium as recited in claim 1, wherein the associated metadata  
2 comprises a data structure embodied on a processor-readable medium, the  
3 structure having one or more fields selected from a group consisting of:

4           an application identifier field for identifying the DTV application;

5           an originator identifier field for identifying the originator of the DTV  
6 application;

7           an application-type field for indicating a type of the DTV application;

8           a visibility field for indicating the degree of control a user has over the  
9 DTV application; and

10          a rating field for indicating a rating of the DTV application.

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12           8.     A medium as recited in claim 1, wherein the associated metadata  
13 comprises a data structure having fields selected from a group consisting of:

14          an application identifier field for identifying the DTV application;

15          an originator identifier field for identifying the originator of the DTV  
16 application;

17          an application-type field for indicating a type of the DTV application;

18          a profile field for indicating a minimum profile of a system on which the  
19 DTV application will execute;

20          a visibility field for indicating the degree of control a user has over the  
21 DTV application;

22          a permission field for denoting "sandbox" security permission of the DTV  
23 application; and

24          a rating field for indicating a rating of the DTV application.

1           9.     A processor-readable medium having processor-executable  
2 instructions that, when executed by a processor, performs a method comprising:

3           receiving a transmission which includes application signal information  
4 about a digital television (DTV) application, wherein such information is based on  
5 metadata associated with the DTV application;

6           presenting a user interface (UI) configured to inform a user about the DTV  
7 application, wherein contents of the UI are based upon the received application  
8 signal information.

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10          10.    A medium as recited in claim 9, wherein the method further  
11 comprises receiving user input via the UI.

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13          11.    A medium as recited in claim 9, wherein the application signal  
14 information comprises a data structure embodied on a processor-readable medium,  
15 having fields selected from a group consisting of:

16           an application identifier field for identifying the DTV application;

17           an originator identifier field for identifying the originator of the DTV  
18 application;

19           an application-type field for indicating a type of the DTV application;

20           a visibility field for indicating the degree of control a user has over the  
21 DTV application; and

22           a rating field for indicating a rating of the DTV application.

1           12.    A data structure for metadata associated with a digital television  
2 (DTV) application, the structure being embodied on a processor-readable medium  
3 having fields comprising:

4           an application identifier field for identifying the DTV application;

5           an originator identifier field for identifying the originator of the DTV  
6 application;

7           an application-type field for indicating a type of the DTV application;

8           a visibility field for indicating the degree of control a user has over the  
9 DTV application; and

10          a rating field for indicating a rating of the DTV application.

1           13.    A data structure for metadata associated with a digital television  
2 (DTV) application, the structure being embodied on a processor-readable medium  
3 having fields selected from a group consisting of:

4           an application identifier field for identifying the DTV application;

5           an originator identifier field for identifying the originator of the DTV  
6 application;

7           an application-type field for indicating a type of the DTV application;

8           a profile field for indicating a minimum profile of a system on which the  
9 DTV application will execute;

10          a visibility field for indicating the degree of control a user has over the  
11 DTV application;

12          a permission field for denoting "sandbox" security permission of the DTV  
13 application; and

14          a rating field for indicating a rating of the DTV application.  
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2       14. A method for managing digital television (DTV) application  
3 signaling, the method comprising:

4       receiving a DTV application and its associated metadata;

5       constructing and formatting a DTV data service transmission which  
6 comprises the DTV application;

7       generating a data grouping having application signaling information,  
8 wherein the information is based upon the metadata associated with the DTV  
9 application;

10       application-signaling a DTV receiving unit via a transmission comprising  
11 the data grouping.

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13       15. A method as recited in claim 14, further comprising provisioning  
14 transmission bandwidth to transmit periodically the application signaling  
15 information built for the metadata.

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17       16. A method as recited in claim 14, wherein the metadata is part of an  
18 Extended Asset Definition Interface.

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20       17. A method as recited in claim 14, further comprising generating a  
21 content referencing identifier for the DTV application.

1           18. A method as recited in claim 14, wherein the associated metadata  
2 comprises a data structure embodied on a processor-readable medium, the  
3 structure having fields comprising:

4           an application identifier field for identifying the DTV application;

5           an originator identifier field for identifying the originator of the DTV  
6 application;

7           an application-type field for indicating a type of the DTV application;

8           a visibility field for indicating the degree of control a user has over the  
9 DTV application; and

10          a rating field for indicating a rating of the DTV application.

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12           19. A method as recited in claim 14, wherein the associated metadata  
13 comprises a data structure embodied on a processor-readable medium, the  
14 structure having one or more fields selected from a group consisting of:

15          an application identifier field for identifying the DTV application;

16          an originator identifier field for identifying the originator of the DTV  
17 application;

18          an application-type field for indicating a type of the DTV application;

19          a visibility field for indicating the degree of control a user has over the  
20 DTV application; and

21          a rating field for indicating a rating of the DTV application.



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2       **20.** A digital television (DTV) application management system  
3 comprising:

4       a receiving means for receiving a digital television (DTV) application and  
5 its associated metadata;

6       a generating means for receiving a data grouping having application  
7 signaling information, wherein the information is based upon the metadata  
8 associated with the DTV application;

9       a sending means for sending a transmission to a DTV receiving unit,  
10 wherein such transmission comprises the data grouping.  
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12       **21.** A system as recited in claim 20, wherein the associated metadata  
13 comprises a data structure embodied on a processor-readable medium, the  
14 structure having one or more fields selected from a group consisting of:

15       an application identifier field for identifying the DTV application;

16       an originator identifier field for identifying the originator of the DTV  
17 application;

18       an application-type field for indicating a type of the DTV application;

19       a visibility field for indicating the degree of control a user has over the  
20 DTV application; and

21       a rating field for indicating a rating of the DTV application.  
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1           22. A digital television (DTV) application management system  
2 comprising:

3           an asset receiver configured to receive a digital television (DTV)  
4 application and its associated metadata;

5           an application signaling generator configured to generate a data grouping  
6 having application signaling information, wherein the information is based upon  
7 the metadata associated with the DTV application;

8           a transmitter configured to send a transmission to a DTV receiving unit,  
9 wherein such transmission comprises the data grouping.  
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11           23. A system as recited in claim 22, wherein the associated metadata  
12 comprises a data structure embodied on a processor-readable medium, the  
13 structure having fields comprising:

14           an application identifier field for identifying the DTV application;

15           an originator identifier field for identifying the originator of the DTV  
16 application;

17           an application-type field for indicating a type of the DTV application;

18           a visibility field for indicating the degree of control a user has over the  
19 DTV application; and

20           a rating field for indicating a rating of the DTV application.  
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22           24. A system as recited in claim 22, wherein the associated metadata  
23 comprises a data structure embodied on a processor-readable medium, the  
24 structure having fields consisting of:

25           an application identifier field for identifying the DTV application;

1 an originator identifier field for identifying the originator of the DTV  
2 application;

3 an application-type field for indicating a type of the DTV application;

4 a visibility field for indicating the degree of control a user has over the  
5 DTV application; and

6 a rating field for indicating a rating of the DTV application.  
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8 25. A system as recited in claim 22, wherein the associated metadata  
9 comprises a data structure embodied on a processor-readable medium, the  
10 structure having one or more fields selected from a group consisting of:

11 an application identifier field for identifying the DTV application;

12 an originator identifier field for identifying the originator of the DTV  
13 application;

14 an application-type field for indicating a type of the DTV application;

15 a visibility field for indicating the degree of control a user has over the  
16 DTV application; and

17 a rating field for indicating a rating of the DTV application.  
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1           26.    A system as recited in claim 22, wherein the associated metadata  
2 comprises a data structure having fields selected from a group consisting of:

3           an application identifier field for identifying the DTV application;

4           an originator identifier field for identifying the originator of the DTV  
5 application;

6           an application-type field for indicating a type of the DTV application;

7           a profile field for indicating a minimum profile of a system on which the  
8 DTV application will execute;

9           a visibility field for indicating the degree of control a user has over the  
10 DTV application;

11          a permission field for denoting "sandbox" security permission of the DTV  
12 application; and

13          a rating field for indicating a rating of the DTV application.  
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